v1.20_ MySQL

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- slave-
  -
  -
  -
  -
-
  -
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  -
-
-

, MySQL, master-master (-). . Eltex.EMS (**http://dev.mysql.com/doc/refman/5.5/en/replication.html**). . , .

[mysqld] /etc/mysql/mysql.conf.d/mysqld.cnf :

- :

```
bind-address = 127.0.0.1
```

- server-id. :

:

```
server-id = 1
```

:

```
server-id = 2
```

- :

```
log_bin = /var/log/mysql/mysql-bin.log;
```

- **auto_increment_increment** ( ) **auto_increment_offset** ( ).

:

```
auto_increment_increment= 2
auto_increment_offset = 1
```

:

```
auto_increment_increment= 2
auto_increment_offset = 2
```

- , :

```
binlog-do-db = eltex_alert
binlog-do-db = eltex_ems
binlog-do-db = wireless
binlog-do-db = radius
binlog-do-db = eltex_auth_service
binlog-do-db = ELTEX_PORTAL
binlog-do-db = eltex_doors
binlog-do-db = eltex_ngw
```

- , :

```
binlog-ignore-db = mysql
binlog-ignore-db = Syslog
binlog-ignore-db = performance_schema
binlog-ignore-db = information_schema
```

- **mysql :**

```
sudo service mysql restart
```

:

```
GRANT REPLICATION SLAVE ON *.* TO 'replication'@'<ip_server2>' IDENTIFIED BY 'password';
FLUSH PRIVILEGES;
```

:

```
GRANT REPLICATION SLAVE ON *.* TO 'replication'@'<ip_server1>' IDENTIFIED BY 'password';
FLUSH PRIVILEGES;
```

slave-

- MySQL :

```
show master status \G
```

- :

```
mysql> show master status \G
*************************** 1. row ***************************
            File: mysql-bin.000001
        Position: 00000107
    Binlog_Do_DB: eltex_alert,eltex_ems,wireless,radius,eltex_auth_service,ELTEX_PORTAL,eltex_doors,eltex_ngw
Binlog_Ignore_DB: mysql,Syslog,performance_schema,information_schema
1 row in set (0.00 sec)
```

- **File Position.**

:

```
mysql>  CHANGE MASTER TO MASTER_HOST='<ip_server1>', MASTER_USER='replication', MASTER_PASSWORD='password',
MASTER_LOG_FILE='mysql-bin.000001', MASTER_LOG_POS=107;
START SLAVE;
```

MASTER_LOG_FILE=**'mysql-bin.000001'** – **File**, .

MASTER_LOG_POS=**107** – **Position**, .

show slave status \G

```
mysql> show slave status \G
*************************** 1. row ***************************
               Slave_IO_State: Waiting for master to send event
                  Master_Host: <ip_server1>
                  Master_User: replication
                  Master_Port: 3306
                Connect_Retry: 60
              Master_Log_File: mysql-bin.001783
          Read_Master_Log_Pos: 107
               Relay_Log_File: mysqld-relay-bin.000001
                Relay_Log_Pos: 107
        Relay_Master_Log_File: mysql-bin.001783
             Slave_IO_Running: Yes
            Slave_SQL_Running: Yes
              Replicate_Do_DB:
          Replicate_Ignore_DB:
           Replicate_Do_Table:
       Replicate_Ignore_Table:
      Replicate_Wild_Do_Table:
  Replicate_Wild_Ignore_Table:
                   Last_Errno: 0
                   Last_Error:
                 Skip_Counter: 0
          Exec_Master_Log_Pos: 107
              Relay_Log_Space: 107
              Until_Condition: None
               Until_Log_File:
                Until_Log_Pos: 0
           Master_SSL_Allowed: No
           Master_SSL_CA_File:
           Master_SSL_CA_Path:
              Master_SSL_Cert:
            Master_SSL_Cipher:
               Master_SSL_Key:
        Seconds_Behind_Master: 0
Master_SSL_Verify_Server_Cert: No
                Last_IO_Errno: 0
                Last_IO_Error:
               Last_SQL_Errno: 0
               Last_SQL_Error:
  Replicate_Ignore_Server_Ids:
             Master_Server_Id: 2
1 row in set (0.00 sec)
```

Slave _ IO _ Running Slave _ SQL _ Running *«Yes»*, .

- :

```
use eltex_ems;
create table test1 (mid int(11) auto_increment, PRIMARY KEY (mid)) Engine=MyISAM;
```

- , .

```
show tables from eltex_ems;
```

- MySQL :

```
show master status \G
```

- :

```
mysql> show master status \G
*************************** 1. row ***************************
            File: mysql-bin.000001
        Position: 00000107
    Binlog_Do_DB: eltex_alert,eltex_ems,wireless,radius,eltex_auth_service,ELTEX_PORTAL,eltex_doors,eltex_ngw
Binlog_Ignore_DB: mysql,Syslog,performance_schema,information_schema
1 row in set (0.00 sec)
```

:

```
CHANGE MASTER TO MASTER_HOST='<ip_server2>', MASTER_USER='replication', MASTER_PASSWORD='password',
MASTER_LOG_FILE='mysql-bin.000001', MASTER_LOG_POS=107;
START SLAVE;
```

```
mysql> show slave status \G
*************************** 1. row ***************************
               Slave_IO_State: Waiting for master to send event
                  Master_Host: <ip_server2>
                  Master_User: replication
                  Master_Port: 3306
                Connect_Retry: 60
              Master_Log_File: mysql-bin.000001
          Read_Master_Log_Pos: 107
               Relay_Log_File: mysqld-relay-bin.000001
                Relay_Log_Pos: 107
        Relay_Master_Log_File: mysql-bin.000001
             Slave_IO_Running: Yes
            Slave_SQL_Running: Yes
```

(,)

, . .

, :

replication.sh

```
#!/bin/bash
REMOTE_HOST='<IP  >'
LOGIN='<        >'
PASS='<        >'

REMOTE_FILE=`mysql --host=$REMOTE_HOST --user=$LOGIN --password=$PASS -e "show master status \G" | grep
"File" | awk '{print $2}'`
REMOTE_POS=`mysql --host=$REMOTE_HOST --user=$LOGIN --password=$PASS -e "show master status \G" | grep
"Position" | awk '{print $2}'`

echo REMOTE_FILE=$REMOTE_FILE
echo REMOTE_POS=$REMOTE_POS
mysql --user=$LOGIN --password=$PASS -e "stop slave"
mysql --user=$LOGIN --password=$PASS -e "CHANGE MASTER TO MASTER_HOST='$REMOTE_HOST',
MASTER_USER='replication', MASTER_PASSWORD='password', MASTER_LOG_FILE='$REMOTE_FILE',
MASTER_LOG_POS=$REMOTE_POS;"
mysql --user=$LOGIN --password=$PASS -e "start slave"
```

, mysql .

:

```
chmod +x replication.sh
```

- **/etc/keepalived/revive_mysql_replication.sh** :

```
#!/bin/bash
LOCAL_FILE=`mysql --user=root --password=root -e "show slave status \G" | grep" Master_Log_File" | awk ' {print
$2}'`
REMOTE_FILE=`mysql --host=<IP   > --user=root --password=root -e "show master status \G" | grep "File" | awk
'{print $2}'`

if [ $LOCAL_FILE != $REMOTE_FILE ]
 then
 mysql --user=root --password=root -e "stop slave"
 mysql --user=root --password=root -e "start slave"
fi
```

host – .

- cron :

```
crontab -l | { cat; echo "*/1 * * * * /etc/keepalived/revive_mysql_replication.sh"; } | crontab
```

- (IP-):

```
GRANT ALL PRIVILEGES ON *.* TO 'root'@'<ip_server2>' IDENTIFIED BY 'root';
FLUSH PRIVILEGES;
```

- (IP-):

```
GRANT ALL PRIVILEGES ON *.* TO 'root'@'<ip_server1>' IDENTIFIED BY 'root';
FLUSH PRIVILEGES;
```